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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,042	04/05/2001	Norman S. Martucci	79287.21620	4862

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EXAMINER	
HOOK, JAMES F	

ART UNIT	PAPER NUMBER
3754	

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/827,042	MARTUCCI ET AL.	
	Examiner	Art Unit	
	James F. Hook	3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6-14,16,17 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 6-14, 16, 17 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Soles. The patent to Soles discloses the recited hose assembly consisting of a tubular first layer 50 formed of a polymeric fluorocarbon material such as polytetrafluoroethylene (PTFE) which is inherently resistant to chemical and heat degradation, at least one braided layer 52 which is inherently capable of passing a volumetric test and whip test, where such is disposed around the inner layer and is formed of metal wires, and a jacket 54 formed of extruded polyamide that is extruded such that the jacket maintains the braided layer in place between the first layer and the jacket.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6-9, 12-14, 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Atwell (201). The patent to King discloses the

recited hose assembly comprising a tubular first layer 12 made of a polymeric material resistant to chemical and heat degradation, which can be provided with carbon black 16 to dissipate electrical charge, a jacket layer 14 disposed about the inner layer, and at least one aramid fiber braided layer 13 disposed between the inner and jacket layers where the use of an aramid fiber layer will allow the layer to be "capable" of passing tests due to the inherent properties of the fibers being used, where glass fibers also can be used in combination with the aramid fibers, where the inner and jacket layers can be formed of a fluorocarbon material such as PTFE, and a coupling means 30 can be provided on the hose ends. The patent to King also states that the outer layer 14 holds the fabric layer in place, and that the layer adds abrasion resistance. Layer 14 is also described as a coating that coats the yarns, therefore it is considered to be a layer formed over the yarn layer. The patent to King discloses all of the recited structure with the exception of forming the outer layer by extruding it, clearly reciting that the jacket layer extends beyond the braided layer, and forming the jacket of polyamide. The patent to Atwell discloses the recited hose assembly comprising an inner layer 2, a reinforcement layer 3 made up of nylon where the outer layer 5 can be extruded over and then embedded in the reinforcement layer such that the outer layer holds the braided layer to the inner hose, and where the jacket or outer layer 5 is made of various different plastics including various types of nylon (which is polyamide) including nylon 6 and 12. It would have been obvious to one skilled in the art to modify the outer layer of King by using an extrusion process to place the layer on the outside of the reinforcement layer and then embed it into the reinforcement layer as suggested by

Atwell as such would be an equivalent way to insure the jacket layer embeds into the braided layer and connects the inner layer to the jacket or outer layer to prevent delamination thereby saving money in replacement costs.

Claims 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Powell (988). The patent to King discloses the recited hose assembly comprising a tubular first layer 12 made of a polymeric material resistant to chemical and heat degradation, which can be provided with carbon black 16 to dissipate electrical charge, a jacket layer 11 disposed about the inner layer, and at least one aramid fiber braided layer 13 disposed between the inner and jacket layers where the use of an aramid fiber layer will allow the layer to be "capable" of passing tests due to the inherent properties of the fibers being used, where glass fibers also can be used in combination with the aramid fibers, where the inner and jacket layers can be formed of a fluorocarbon material such as PTFE, and a coupling means 30 can be provided on the hose ends. The patent to King also states that the outer layer 14 holds the fabric layer in place, and that the layer adds abrasion resistance. Layer 14 is also described as a coating that coats the yarns, therefore it is considered to be a layer formed over the yarn layer. The patent to King discloses all of the recited structure with the exception of forming the outer layer by extruding it, and forming the jacket of polyamide including nylon 6. The patent to Powell discloses the recited hose assembly comprising an inner layer 14 of PTFE and other materials, a reinforcement layer 30 made up of different fibers where the outer layer 40, which can be made of polyamides, of which nylon 6 is listed elsewhere as the types of polyamides used to make layers of

the hose, can be extruded over and then embedded in the reinforcement layer, or other methods such as spray coating, dip coating, cross head or coextrusion, or spirally wrapped (col. 7, lines 42-56), and where an adhesive can be used with the fibers to adhere them to the hose. It would have been obvious to one skilled in the art to modify the outer layer of King by using an extrusion process to place the layer on the outside of the reinforcement layer and then embed it into the reinforcement layer as suggested by Powell as such would be an easier process to use without requiring thinning of the polymer layer for application thereby reducing costs and smoothing the outer layer for aesthetic purposes, and such is an equivalent method used as suggested by Powell, to modify the outer layer to be made of polyamides such as nylon 6 as such is a known equivalent material used for protective jackets where such is a cheaper material as suggested by Powell where such would prevent premature failure thereby saving money.

Claims 1, 2, 6-9, 12-14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soles in view of Powell (988). The patent to Soles discloses all of the recited structure with the exception of forming the braided reinforcement layer of aramid fibers, forming the outer layer of fluorocarbon material, and adding a conductive agent to the inner layer. The patent to Powell discloses the structure above and teaches that it is old and well known in the art to form braided reinforcing layers of various types of materials including metal wires and aramid fibers, and that the outer layer can be formed of various materials including polyamides and fluoropolymers, and that carbon black can be added to layers to make them conductive. It would have been

obvious to one skilled in the art to modify the reinforcement layer of Soles by substituting aramid fibers for the metal wires used as such are known equivalent materials used for reinforcing layers, to modify the outer layer to be made of a fluoropolymer material as such is a known equivalent material used to form outer cover layers, and to provide a layer in the hose with conductive material such as carbon black to make the layer conductive to electricity to dissipate any charge the hose is exposed to as suggested by Powell where such would provide alternative materials to be used for different environments and would help prevent premature failure thereby saving money in replacement costs.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soles in view of Powell (988) as applied to claims 1, 2, 6-9, 12-14, 16 and 17 above, and further in view of King. The patent to Soles as modified discloses all of the recited structure with the exception of providing the reinforcing layer with two different types of materials where glass fibers can also be included in the reinforcing layer. It would have been obvious to one skilled in the art to provide the reinforcing layer in Soles as modified with additional glass fibers as suggested by King where such would provide added strength to the reinforcing layer thereby preventing premature failure and saving money in replacement costs.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soles in view of Powell as applied to claims 1, 2, 6-9, 12-14, 16 and 17 above, and further in view of Martucci (084). The patent to Soles as modified discloses all of the recited structure with the exception of forming the inner layer of expanded

fluoropolymers. The patent to Martucci discloses the recited hose assembly comprising an inner layer 116 which can be formed of expanded or foamed fluoropolymers such as PTFE, where reinforcements 121 are provided over the foamed layer, and end couplings 130 are also provided. It would have been obvious to one skilled in the art to modify the inner layer of Soles as modified by forming the layer of a foamed material as such is known in the art to form the inner layer of a foamed fluoropolymer to allow for easier attachment of couplings at the end as suggested by Martucci where such would save money in labor costs.

Response to Arguments

Applicant's arguments with respect to claims rejected under the combination of King in view of Horne have been considered but are moot in view of the new ground(s) of rejection.

With respect to the arguments directed toward Soles, the jacket originally covers the a substantially continuous surface, where such is not a limitation that would have to include end to end or over the entire outer surface, and the jacket of Soles is only removed to place the connector on, and would still only be a small discrete area that it was removed from, therefore such would be considered to still meet the limitation of being disposed substantially continuously over the braid where the layer is substantially continuous in the jacket of the hose that runs from connector to connector, therefore such is still considered to read on the prior art to Soles. With respect to the teachings of King it would still appear that the coating of the braided layer would have to be

substantially continuously provided over the braid, however, since modification was required to overcome the extruded limitation for the jacket, the new modifying reference teaches the jacket extending well above the braided layer and still embeds the braided layer within the jacket layer as applicant argues, therefore it is considered that the combination of references meets the claim language. With respect to Powell, such is being used to teach the modification of the manner in which the outer jacket layer is formed over the braided layer, it is not intended to teach any of the fiber structure of the braided layer in that such is covered by King, any mention of similar materials is meant to establish the equivalence of the two references, however, Powell is only being used to modify the manner in which the jacket layer is provided over the braided layer and the plastic used for that jacket layer, not in any manner is it modifying the King reference with respect to materials used for the braided layer therefore any argument directed toward the teachings of Powell with regards to what type of braided layer it has is not persuasive as to why Powell cannot be used to modify the manner in which the jacket layer is provided on King or what material is used for that jacket layer. With respect to the Lalikos reference, such is moot in that this rejection has been dropped. With respect to Soles, see the discussion above, and with respect to it's combination with Powell, such is not persuasive where the reference to Poweel is used to modify the type of reinforcement used in the braided layer and the types of materials used for the inner and outer layer, whereas the arguments appear to be directed toward other structure not relied upon in the Powell reference or required by the Soles reference.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Schaerer and Keith disclosing state of the art hoses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James F. Hook
Primary Examiner
Art Unit 3754

JFH